

A new species of *Malloch* Viereck (Hymenoptera: Ichneumonidae, Cryptinae) from Florida

D.R. Kasparyan & R.A. Wharton

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A new species of ichneumon-flies, *Malloch townesi* sp. n. (Cryptinae), is described from USA, Florida. A key for separating *M. pyralidis* Wharton from the closely related *M. agenioides* Viereck is given.

D.R. Kasparyan, Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, St.Petersburg 199034, Russia & División de Postgrado e Investigación, UAM Agronomía y Ciencias, Universidad Autónoma de Tamaulipas, Cd.Victoria, Tam. 87149, Mexico.

R.A. Wharton, Department of Entomology, Texas A & M University, College Station, Texas, USA.

The ichneumonid genus *Malloch* belongs to the mainly Neotropical subtribe Lyneonina (Cryptinae: Cryptini). Nine species have been recorded in the genus, most of them from USA and Mexico (Townes & Townes, 1962, 1966; Wharton, 1988; Yu & Horstmann, 1997). One species is known from Brazil (Taschenberg, 1876). Some characters of morphology of the genus (rather swollen temples, tooth on lower margin of clypeus, thickened front tibiae, strong mandibles, vertical teeth on tip of lower valve of ovipositor, robust first tergite with spiracles near its middle) convergently link *Malloch* with genera of the subtribe Gabuniina known as parasites of wood and stem-borer insects. One species of *Malloch* (*M. pyralidis* Wharton) has also been recorded from a stem-borer, *Eoreuma loftini* (Dyar) (Pyralidae), an important pest of sugar cane. Here a new species from Florida is described. Some additional characters for separating *M. pyralidis* from the closely related *M. agenioides* Viereck are given.

The holotype of the new species is deposited at the American Entomological Institute, Gainesville, Florida, USA, the paratype, at the Museum of Insects, Universidad Autónoma de Tamaulipas, Cd.Victoria, Mexico (UAT).

Genus **Malloch** Viereck, 1912

Viereck, 1912: 591; Townes & Townes, 1962: 36, 90, 533, 551, 554 (in key to genera of Mesostenina; description, key to 4 Nearctic species, figs); 1966: 67, 307 (in key to genera of Mesostenina, bibliogr. to 5 Neotropical spe-

cies); Townes, 1970: 277, 283, 482, 483 (in key to genera of Lyneonina; description; figs 243a, 243b).

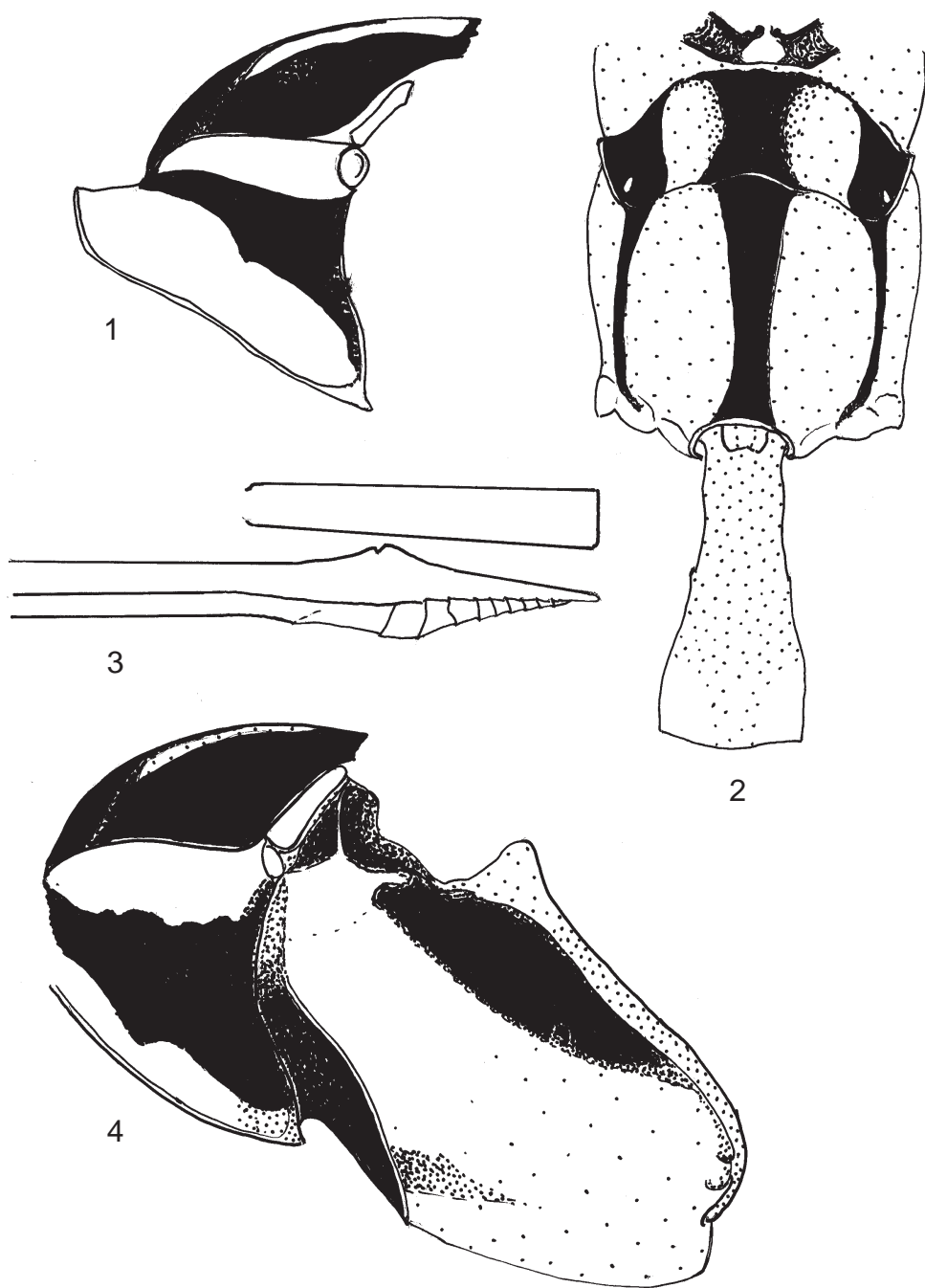
Type: *Malloch agenioides* Viereck. Original designation.

Malloch townesi sp. n.
(Figs 1-3)

Holotype: ♀, USA, Florida, Gainesville, 4.VI.1988 (D. Kasparyan).

Paratype. ♀, same locality as in holotype, oak forest, 31.V.1988 (D. Kasparyan).

Description. *Female* (holotype). Fore wing 5.2 mm long. Antenna with 23 flagellar segments; flagellum thickened to apex, its first 3 segments subequal in length, about 8.5 times as long as wide at the middle; two basal flagellomeres combined 1.35 times as long as maximum diameter of eye. Malar space about 0.8 times as long as basal width of mandible. Face and clypeus finely granulate with rather fine, moderately dense punctures; frons smoother, finely granulate. Temples shiny, polished. Pronotum smooth, almost polished, without distinct punctures; lateral lobes of mesoscutum polished, impunctate, with fine hairs only on anterior slope and along lateral margin; median lobe granulate, with rather sparse, shallow and moderately large punctures. Scutellum and postscutellum shiny, polished, impunctate. Mesopleurum shiny, without distinct punctures, with fine arched striae on oblique depression between subtegular ridge and mesopleural pit. Upper division of metapleurum shiny and



Figs 1-4. *Mallochia*, females: (1-3) *M. townesi* sp. n., (4) *M. pyralidis* Wharton. **1**, pronotum and anterior part of mesoscutum (colour pattern); **2**, propodeum, dorsal view (colour pattern); **3**, ovipositor tip, lateral view, with second segment of hind tarsus (above); **4**, mesopleurum with adjacent parts of thorax (colour pattern).

almost smooth. Metapleurum with fine, dense, subvertical striae. This striate sculpture also covers the propodeum but basad of basal transverse carina striae obscured by granulation and punctures and laterally (around spiracles) become irregular. Propodeum posteriorly before lateral corners with a pair of subpolished callosities. Hind coxa mat, with superficial, moderately fine and rather dense punctures in addition to microsculpture. Areolet not closed, 0.83 times as high as portion of second recurrent vein above the bulla; nervulus distinctly antefurcal; postnervulus intercepted at upper 0.2. First tergite granulate, its basal 0.2 polished; hairs on dorsal part of tergite 1 scarce and short, rather dense on lateral parts. Tergites 2-4 mat, with superficial scabrous sculpture in basal half and uniformly granulate posteriorly; following tergites shiny, almost smooth, with discernible granulation. Ovipositor sheath about 0.55 times as long as hind tibia (in most congeners ovipositor longer). Ovipositor tip as in Fig. 3; tip of upper valve distad of nodus 0.61 times as long as second segment of hind tarsus.

Head and thorax white (ivory) with some black spots and surfaces; legs and abdomen completely pale rufous (light orange). Antenna blackish brown; scape brownish (not pale) beneath; pedicel with pale apical margin; flagellar segments 5-9 completely white, except that segments 5 and 9 slightly darkened ventrally. Head white; frons with wide longitudinal black band extending from median point just above antennal sockets to occipital carina; occiput black in upper half and above with small yellowish median dot just behind occipital carina. Prothorax white; prosternum and median suture of propleurum black; pronotum with black transverse band (Fig. 1) Mesoscutum black with two wide ivory submedian stripes extending almost to prescutellar groove. Scutellum ivory, its lateral surface to base of fore wings black. Tegulae white. Mesopleurum almost entirely white, only prepectus on anterior margin, hind part of subalar prominence, short stripe at upper margin of mesopleurum (beyond the subtegular ridge), small spot on mesopleural pit, and lower 0.4 of mesopleural suture blackish or brownish. Metanotum black with postscutellum white. Metapleurum white with small infuscation in anterior lower corner and just beyond postscutellum. Propodeum predominantly white with three longitudinal black stripes (Fig. 2). Fore coxa and fore trochanter I and large dorsal spot on middle coxa white, other parts of legs uniformly pale orange with fifth segment of all tarsi brownish dorsally. Abdomen light orange with apical white band on tergite 1. Pterostigma pale yellowish.

Comparison. Structurally, *M. townesi* closely resembles *M. laevis* Townes in having similar habitus, polished and almost impunctate pronotum, lateral lobes of mesoscutum, and mesopleurum, in having hind wing without brachiella, and ovipositor short. It distinctly differs from entirely reddish *M. laevis* by black and white coloration of head and metasoma (Figs 1, 2); from this and other species of the genus *M. townesi* differs also in having basal flagellomeres longer, ovipositor shorter, and postnervellus intercepted close to its anterior end.

Remarks. The species is named in honour of Henry Townes.

Mallochia agenioides Viereck, 1912 and **M. pyralidis** Wharton, 1988

These two species are very similar structurally and chromatically. Females in both species have the body and legs uniformly reddish (usually somewhat paler in *M. agenioides*), fore wing with two transverse fuscous bands, antenna dark with flagellar segments (5)6-8(9-10) white, mesoscutum entirely densely and coarsely punctured, pronotum, mesopleurum and metapleurum with dense and coarse punctures.

In males head and thorax whitish yellow with following parts black: frons and vertex, except for orbits, occiput, transverse wide band on pronotum (Figs 1, 4), mesoscutum (except for two submedian yellow stripes), lateral surface from base of front wing to apical part of scutellum, bands on anterior and posterior margin of mesopleurum (except for mesepimeron), basal transverse carina and three longitudinal stripes on propodeum; flagellum fuscous without white band; abdomen and legs pale orange, tergites with white apical band at least on tergite 1, hind tibia at apex and segments 1 and (4)5 of hind tarsus dark brown, its segments 2-3 white. Based on a study of the types of these and other species of *Mallochia* and the rather large material in the collection of Texas A & M University and of Museum of Insects of UAT, the authors propose the following key for distinguishing these two species.

1. Females 2
 – Males 3
2. Two or three basal flagellar segments reddish or reddish brown ventrally. Segments of white ring (usually flagellomeres 6-8) brownish ventrally. Body usually paler (reddish yellow); margins of proximal fuscous band on front wing indistinct, the band sometimes very weak **M. agenioides** Viereck
- Basal flagellar segments completely blackish brown. Segments of white ring (usually flagellomeres 6-8) entirely white/yellow or sometimes very weakly infuscate ventrally. Body usually darker (reddish ferrugineous); margins of both fuscous bands on front wing sharply defined **M. pyralidis** Wharton

3. Upper margin of mesopleurum (except for subtegular ridge) entirely black (as in figure 331a in Townes & Townes, 1962) ***M. agenioides*** Viereck
- Upper margin of mesopleurum yellow at median part (yellow colour of subtegular ridge confluent with yellow coloration of mesopleurum – Fig. 4) ***M. pyralidis*** Wharton

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